Prospectus Requirements and Review Procedures for NASA/USDA Focus Area Working Groups

I. Background

The Memorandum of Understanding (MOU) between NASA and USDA (signed May 30, 2003) authorized creation of an interagency working group to expedite collaboration between NASA and USDA to meet their respective programmatic objectives. On December 15, 2003, the Interagency Working Group on Earth Science Applications (IWGESA) convened and confirmed eight areas of potential collaboration:

- Agricultural efficiency
- Air quality management
- Carbon management
- Disaster management
- Homeland security
- Invasive species
- Resource inventory and monitoring
- Water management and conservation

A Focus Area Working Group (FAWG) has been assigned for each of the eight areas. The FAWGs will draw upon appropriate staff among the participating agencies within USDA and with support from the Earth Science Applications Division in the Office of Earth Science at NASA to define specific projects for collaboration. These projects will be presented as prospectuses to the IWGESA, and the IWGESA will respond with recommendations on project implementation.

This paper describes the information to be included in prospectuses submitted by the FAWGs to the IWGESA and the process by which the interagency working group will evaluate the prospectuses and make recommendations on implementation options.

II. Prospectus Requirements and Submission

A Project Plan Prospectus Guide (Attachment A) lists the information that should be included in a prospectus and describes the format to follow. Incomplete or improperly formatted prospectuses will be returned to the FAWGs for additions and corrections before consideration.

A FAWG may submit a prospectus to the IWGESA at any time by forwarding the prospectus to the chair of the Review Committee (see section III. below) or a recipient designated by the co-chairs of the IWGESA. Prospectuses submitted to the Review Committee should be fully vetted by the FAWG to assure that the prospectuses meet the requirements listed in Attachment A and the programmatic objectives of USDA and NASA as described in the MOU.

The FAWGs may consider prospectuses that require immediate funding (within the fiscal year) or prospectuses that require longer term commitment or start-up in the out years. The IWGESA does not have funding authority. Funding provided to a project will be through an established funding mechanism and in accordance with all relevant procurement regulations.

FAWG Chairpersons should attend meetings of the IWGESA to respond to questions regarding their prospectuses. In addition, FAWG Chairpersons should attend meetings of the USDA Remote Sensing Coordination Committee (RSCC). The objective of the RSCC meetings is to help Chairpersons identify potential areas of overlap among FAWGs, and where possible, encourage coordination among FAWGs prior to the prospectuses being submitted to the IWGESA for review.

III. Prospectus Review and Response

A committee established and appointed by the IWGESA will review prospectuses submitted by the FAWGs. The Review Committee will consist of a chairperson (USDA) and no more than four members (five total) of which no more than two will be from either NASA or USDA. The committee will review the prospectuses received from the FAWGs and report its recommendations to the FAWGs and the IWGESA.

A. Responsibilities of the Review Committee:

- 1) Respond to the FAWG no later than 60 days following receipt of the prospectus by the committee either initial submission or re-submission. The response to the FAWG may be in the form of a request for clarification or more information regarding the prospectus.
- 2) Review the prospectus and comment on its strengths and weaknesses in light of the programmatic objectives of USDA and NASA and the collaboration. Provide those comments to the FAWG. Criteria utilized by the Review Committee in developing prospectus strengths and weaknesses include:
 - a. Relevance to the objectives of the USDA/NASA collaboration as specified in the MOU.
 - b. Involvement of a USDA action agency or agencies as the primary user(s) of the project outcomes, and the potential for the project to enhance the decision support systems of the agency or agencies.
 - c. Utilization of NASA Earth science mission data, model output, and/or research results as a primary input driver in the project.
 - d. Demonstration of understanding of the specific steps or tasks required to achieve the desired project results.
 - e. Funding strategy potential to leverage existing programmatic resources from one or both agencies (for short term projects), or identification of appropriate potential funding options to pursue (for longer duration projects).
- 3) Identify areas of overlap ("cross cutting solutions") among prospectuses.

- 4) Identify, and/or make recommendations on, sources of funding including:
 - a. Existing projects and programs, e.g. NASA's Earth Science Technology Office
 - b. Modification of existing grants, contracts, or cooperative agreements
 - c. Directed funding for a new start
 - d. Existing solicitation
 - e. Initiate a solicitation
- 5) Report recommendations to the FAWG and the IWGESA. Reports to the IWGESA will be in writing and presented at the IWGESA meeting immediately following the written report.

B. The IWGESA will:

- 1) Review recommendations and comments from the Review Committee and endorse the recommendations as appropriate.
- 2) Make further recommendations to NASA and USDA in response to one or more of the prospectuses received. Such recommendations may include development of new technology, broadening or re-direction of existing programs, inclusion of specific themes in solicitations, etc.
- 3) Resolve issues between the FAWGs and the Review Committee.

END

Attachment A Project Plan Prospectus Guide—NASA/USDA Collaborative Program

- 1) Location City and State.
- 2) Title A brief, clear, specific description of the project. Used alone, it should provide an indication of what the project is about.
- 3) Focus Area Being Addressed—(i.e., Agricultural efficiency, Air quality management, Carbon management, Disaster management, Homeland security, Invasive species, Resource inventory and monitoring, Water management and conservation).
- 4) Entities Involved: (e.g., USDA Agencies, NASA, Universities, private industry)
- 5) Investigator(s) List all individuals (e.g., action agency representatives, scientists) assigned to conduct the research being planned
- 6) Program Leader or Co-Leaders—Lead for the project must involve representation from the impacted regulatory and action agencies.
- 7) Planned Duration List in terms of total months (e.g., 60 months).
- 8) Resources—Identify resources committed to the project (e.g., sources of funds and amount from each entity)
- 9) Objective(s)—Develop a clear statement of the specific objectives of the project that are attainable within the time period.
- 10) Need for Project—Justification
- 11) List each of the following briefly:
 - a. Description of the problem/issue to be solved.
 - b. Potential benefits expected from attaining objectives.
 - c. Anticipated products of the project.
 - d. Customers of the project and their involvement.
- 12) Approach and Research Procedures--For each objective, identify the experimental approaches and the specific research procedures that will be used. List approaches and experimental options that will be considered if the initial research plan is unsuccessful in evaluating hypotheses or attaining objectives.

13) Identification of NASA Contributions

- a. Observations and measurements from NASA systems (or observations and measurements required and not currently available from Earth observing systems.)
- b. Model output and predictions from NASA sponsored models or from models that use NASA observations or measurements.
- c. Other NASA contributions

14) Identification of Contributions from other Collaborating Agencies

Describe contributions from agencies other than NASA and USDA necessary to attain the prospectus objectives. "Necessary" means required for a successful project outcome. Necessary contributions should be documented by an appended letter from the outside agency detailing the collaboration. The letters of intent to collaborate must discuss what the collaborating agencies will do and what level of commitment is anticipated, and specifically identify the following contributions from collaborating agencies:

- a. Observations and measurements from Earth observing systems (or observations and measurements required and not currently available from Earth observing systems.)
- b. Model output and predictions from models sponsored by other collaborating agencies or from models that use observations or measurements from these agencies.
- 15) Identification of decision support systems or tools required.
- 16) Linkages to the objectives of other programs.